

**Commonwealth of Kentucky**  
**Natural Resources and Environmental Protection Cabinet**  
**Department for Environmental Protection**  
**Division for Air Quality**  
**803 Schenkel Lane**  
**Frankfort, Kentucky 40601**  
**(502) 573-3382**

**Title V**  
**AIR QUALITY PERMIT**  
**Issued under 401 KAR 52:020**

**Permittee Name:** Kingsford Manufacturing Company  
**Mailing Address:** P.O. Box 9, Summer Shade, KY 42166

**Source Name:** Kingsford Manufacturing Company  
**Mailing Address:** P.O. Box 9, Summer Shade, KY 42166

**Source Location:** 5126 Summer Shade Road, Summer Shade, KY 42166

**Permit Number:** V-04-025  
**Log Number:** 55677/3159  
**Review Type:** Operating/Minor Construction, TV  
**Source ID #:** 21-169-00012

**Regional Office:** Bowling Green Regional Office  
1508 Western Avenue  
Bowling Green, KY 42104-3356  
(270) 746-7475

**County:** Metcalfe

**Issuance Date:**  
**Expiration Date:**

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**John S. Lyons, Director**  
**Division for Air Quality**

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Permit type	Log #	Complete Date	Issuance Date	Summary of Action
<b>F-01-005 Federally-Enforceable Construction/Operating PSD/Synthetic Minor</b>	<b>51541</b>	<b>8/24/2000</b>	<b>7/2/2001</b>	<b>Increase in PM, PM<sub>10</sub>, and NO<sub>x</sub> of over 100 tons/yr (become major PSD source with major PSD modification)</b>
<b>F-01-005 (Revision 1) Federally-Enforceable Construction/Operating PSD/Synthetic Minor</b>	<b>54549</b>	<b>4/15/2002</b>	<b>4/18/2002</b>	<b>Minor Revision - Installation of charcoal briquet silos, and combine dyers and coolers into single stack</b>
<b>F-01-005 (Revision 2) Federally-Enforceable Construction/Operating PSD/Synthetic Minor</b>	<b>54792</b>	<b>8/6/2002</b>	<b>2/4/2003</b>	<b>Minor Revision - Installation of a fabric filter dust collector, relocating the existing packaging line, and installing an additional packaging line</b>
<b>F-01-005 (Revision 3) Federally-Enforceable Construction/Operating PSD/Synthetic Minor</b>	<b>55473</b>	<b>2/26/2003</b>	<b>3/5/2003</b>	<b>Minor Revision - Installation of charcoal briquette dryer and cooler, conversion of two existing coal silos to carbonaceous materials silos, and addition of a new covered conveyor system</b>
<b>V-04-025 Operating/Minor Construction Title V/PSD/</b>	<b>55677</b>	<b>9/16/2003</b>		<b>Minor Revisions including - Increase plant's coal drop point limit, increase in hourly briquet dryer/cooler production rate, silo conversions, new warehouse, new road and new lot</b>

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****Emissions Unit 01 (01) Wood Dryer and Furnace Operations****Description:**

Operating Rate: 7 tons of dry char produced per hour and 50,000 tons per year  
Installation Date: Hereshoff furnace installed 1995, modification 2002 (increased capacity)  
MEC Wet Wood Dryer installed 2002  
Control Equipment: cyclones for wood dryer, cyclones for furnace, and gas streams from the cyclones are combined in the After Combustion Chamber (ACC).  
Auxiliary Burner: 2 @ 50 mmBtu/hr - natural gas-fired

**APPLICABLE REGULATIONS:**

401 KAR 59:010 New process operations applicable to emission units commenced on or after July 2, 1975.  
401 KAR 51:017 Prevention of significant deterioration of air quality (PSD) – Best Available Control Technology (BACT) for nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), and particulate matter less than 10 microns (PM<sub>10</sub>)  
40 CFR 64 Compliance Assurance Monitoring (CAM) - for PM

**1. Operating Limitations:**

- a) Pursuant to 401 KAR 51:017, the total char production shall not exceed 7.0 tons per hour on a daily average basis and 50,000 tons during any consecutive 12-month period. These are operating limits used to determine BACT and potential emissions for modeling under 401 KAR 51:017 for NO<sub>x</sub>, PM, and PM<sub>10</sub> emissions, in addition to a self-imposed operating limit to preclude 401 KAR 51:017 for sulfur dioxide (SO<sub>2</sub>) emissions.
- b) Pursuant to 401 KAR 51:017, the ACC shall be in operation and be operated at a temperature greater than 1,400°F (3-hour average) any time char is being produced.

**Compliance Demonstration Method:**

- a) For compliance with the char production limit, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Hourly char production throughput = [Total char produced during month]/[total hours of char production during month]

- b) For compliance with the ACC operation and operating temperature limits, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements. Immediate corrective actions shall be taken whenever the 3-hour average operating temperature of the ACC falls below 1400°F, or the temperature of the two thermocouple readings in the ACC are not within plus/minus 100°F of each other.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE**

**REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations:**

- a) Pursuant to 401 KAR 51:017, NO<sub>x</sub> emissions from the unit shall not exceed 91.0 pounds per hour.
- b) Pursuant to 401 KAR 51:017, the maximum PM/PM<sub>10</sub> emissions from the unit shall not exceed 59.5 pounds per hour.
- c) Pursuant to 401 KAR 59:010, **if** the dry wood production rate is less than 21.84 tons of dry wood / hr, the PM emissions from the unit (wood dryer and furnace) shall not exceed the following (limit always less than or equal to 59.5 lb PM/hr):

$$\text{Combined Allowable Rate of Emission in lb of PM/hr} = 17.31(P_1)^{0.16} + 17.31(P_2)^{0.16}$$

where P<sub>1</sub> = tons wet wood per hour to dryer minus uncombined moisture

P<sub>2</sub> = tons of dry wood per hour to furnace

$$\text{Maximum} = 59.5 \text{ lb PM/hr}$$

where P<sub>1</sub> = 43.68 – (0.1)(43.68) = 39.31, assuming 10% uncombined moisture in wet wood and P<sub>2</sub> = 21.84, from the combined emissions in the ACC unit.

- d) To preclude 401 KAR 51:017, sulfur dioxide (SO<sub>2</sub>) emissions from the unit shall not exceed 1.5 lbs/ton of char produced.
- e) Pursuant to 401 KAR 59:010, Section 3(1), emissions from the unit shall not exceed twenty (20) percent opacity based on a six-minute average.

**Compliance Demonstration Method:**

- a) For compliance with the NO<sub>x</sub> emission limit, see Subsection 3, Testing Requirements, Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Actual emission rate = [Monthly char production] x [Emission factor (pounds NO<sub>x</sub> per ton of char)] ÷ [Monthly hours of operation]

Emission factor (pounds NO<sub>x</sub> per ton of char) = [average emission (pounds NO<sub>x</sub> per hour) from the stack test with 100% of emissions going out the ACC stack] ÷ [average dry char production rate during testing (tons of char per hour)].

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method (Continued):**

- b) For compliance with the PM/PM<sub>10</sub> emission limit, see Subsection 3, Testing Requirements, Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Actual emission rate = [Monthly char production] x [Emission factor (pounds PM/PM<sub>10</sub> per ton of char)] ÷ [Monthly hours of operation]

Emission factor (pounds PM/PM<sub>10</sub> per ton of char) = [average emission (pounds PM/PM<sub>10</sub> per hour) from the stack test with 100% of emissions going out the ACC stack] ÷ [average dry char production rate during testing (tons of char per hour)].

- c) For compliance with the PM emission limit, see Subsection 3, Testing Requirements, Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Actual emission rate = [Monthly char production] x [Emission factor (pounds PM per ton of char)] / [Monthly hours of operation]

Emission factor (pounds PM per ton of char) = [average emission (pounds PM per hour) from the stack test with 100% of emissions going out the ACC stack] ÷ [average dry char production rate during testing (tons of char per hour)].

The actual emission rate shall be compared to the 401 KAR 51:017 maximum of 59.5 pounds per hour and also compared to the 401 KAR 59:010 process weight formula using the average tons of wet wood, P<sub>1</sub>, or dry wood, P<sub>2</sub>, measured and recorded during the testing.

- d) For compliance with the SO<sub>2</sub> emission limit, see Subsection 3, Testing Requirements, Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

lbs of SO<sub>2</sub>/ton of char produced = [lbs of SO<sub>2</sub>/hr measured from annual stack tests with 100% of emissions going out the ACC] ÷ [average dry char production rate during testing (tons of char per hour)]

- e) For compliance with the opacity limit, the permittee shall perform weekly observations of the ACC stack, see Subsection 4, Specific Monitoring Requirements.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **3. Testing Requirements:**

- a) EPA Reference Method 5 or equivalent shall be performed to determine the combined amount of PM emissions per ton of dry char produced from the wet wood dryer and the furnace. The test shall be performed within 1 year from issuance of this permit, under conditions with 100% of emissions going out the ACC stack. The average production rate of wet wood; average production rate of dry wood; and the average production rate of char shall be measured during the emission test, recorded, and reported with the emission test results.
- b) EPA Reference Method 7 or equivalent shall be performed to determine the amount of NO<sub>x</sub> emissions per ton of dry char produced. The test shall be performed within 1 year from issuance of this permit, under conditions with 100% of emissions going out the ACC stack. The average dry char production rate shall be measured during the emission test, recorded, and reported with the emission test results.
- c) EPA Reference Method 18, Method 25A, or equivalent shall be performed to determine the amount of VOC emissions per ton of dry char produced. The test shall be performed within 1 year from issuance of this permit, under conditions with 100% of emissions going out the ACC stack. The average dry char production rate shall be measured during the emission test, recorded, and reported with the emission test results.
- d) EPA Reference Method 201 and 202 or equivalent shall be performed to determine the amount of PM<sub>10</sub> emissions per ton of dry char produced. The permittee may conduct a modified testing method using an out-of-stack Anderson impactor to determine the PM<sub>10</sub> emission rate from the ACC stack because performing an EPA Method 201 or 202 test at the elevated temperatures in the ACC may be impractical. The test shall be performed within 1 year from issuance of this permit, under conditions with 100% of emissions going out the ACC stack. The average dry char production rate shall be measured during the emission test, recorded, and reported with the emission test results.
- e) To preclude 401 KAR 51:017, EPA Reference Method 6 or equivalent shall be performed to determine the amount of SO<sub>2</sub> emissions per ton of dry char produced. The test shall be performed annually to demonstrate continuous compliance with the sulfur dioxide emission factor of 1.5 lbs/ton of char produced. The test shall be performed within 1 year from issuance of this permit, under conditions with 100% of emissions going out the ACC stack. The average dry char production rate shall be measured during the emission test, recorded, and reported with the emission test results.
- f) If visible emissions from the stack are seen from the weekly qualitative visual observation (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **4. Specific Monitoring Requirements:**

- a) The permittee shall monitor the excess O<sub>2</sub> percent at the stack to determine a 6-minute average. The permittee shall maintain, calibrate, and operate according to manufacturer's specifications and/or standard operating procedures, a monitoring device for the measurement of O<sub>2</sub> concentration at the ACC.

Pursuant to 40 CFR 64, the permittee shall provide reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations including the following:

- b) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- c) The permittee shall monitor the char production of the wood dryer and furnace operations and hours of operation on a monthly basis.
- d) The permittee shall monitor the ACC combustion temperature from a thermocouple located in a representative location in the ACC combustion chamber every second. The temperature and a 15-minute average temperature shall be displayed on a screen in the control room. A 3-hour rolling average temperature shall be calculated.
- e) The permittee shall monitor the ACC combustion temperature from a second thermocouple located in a representative location in the ACC combustion chamber weekly.
- f) The permittee shall maintain, calibrate, and operate according to manufacturer's specifications and/or standard operating procedures, a monitoring device for the measurement of temperature at the ACC.

### **5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following:

- a) Monthly hours of operation and tons of char produced from the wood dryer and furnace operations.
- b) Records of the ACC operating temperatures that are less than 1,400°F (3-hour average) during normal operations.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **5. Specific Recordkeeping Requirements (Continued):**

- c) Weekly logs of qualitative visual observation of the opacity of emissions from the ACC stack, any Method 9 testing results, and any repairs that were made due to any opacity reading which exceeded the standard.
- d) Records of the ACC exhaust O<sub>2</sub> concentrations that are less than 1.0% (6-minute average).
- e) Records of all maintenance activities performed on the cyclones or the ACC.
- f) Records of annual stack testing for sulfur dioxide. See Subsection 3 (e), Testing Requirements.
- g) During all periods of startup, planned or unplanned shutdown, or system malfunction wood dryer and furnace operations, a log of the following information shall be kept:
  - (1) Date and times of periods of startup, planned and unplanned shutdown, or system malfunction.
  - (2) Confirmation that standard operating procedures were followed during planned shutdowns and ensuing startups (and other startup, planned or unplanned shutdown, or system malfunction operations) to minimize air emissions.

### **6. Specific Reporting Requirements:**

See Section F, Conditions 5, 6, 7, and 8.

### **7. Specific Control Equipment Operating Conditions:**

The ACC O<sub>2</sub> concentration shall be greater than or equal to 1.0% (6-minute average).

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emissions Unit 02    Briquet Drying Operations (Briquet Dryers #1, #2, and #3)****Description:**

Operating Rate: 8.5 tons of dry briquets per hour for each dryer (25.5 tons/hr total)  
Installation Date: Briquet Dryer #1 – 1995  
Briquet Dryer #2 – 2002  
Briquet Dryer #3 – 2003  
(2004 proposed increased throughput of briquets with no increase in potential emissions based on existing emission limits)  
Control Equipment: None  
Auxiliary Burner: 1 @ 20 mmBtu/hr - natural gas-fired

**APPLICABLE REGULATIONS:**

401 KAR 59:010 New process operations applicable to emission units commenced on or after July 2, 1975.  
401 KAR 51:017 Prevention of significant deterioration of air quality (PSD) – Best Available Control Technology (BACT) for nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), and particulate matter less than 10 microns (PM<sub>10</sub>) for Briquet Dryers #1 and #2.

**1. Operating Limitations:**

- a) Pursuant to 401 KAR 51:017, the dry briquet throughput shall not exceed 8.5 tons/hr through Briquet Dryer #1, and shall not exceed 8.5 tons/hr through Briquet Dryer #2.
- b) In order to preclude 401 KAR 51:017 significant revision applicability for the installation of Briquet Dryer #3, the dry briquet throughput shall not exceed 8.5 tons/hr through Briquet Dryer #3.

**Compliance Demonstration Method:**

For compliance with the dry briquet production limits, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Hourly briquet production throughput = [Total monthly briquets processed] / [Total monthly hours of briquet dryer operation]

**2. Emission Limitations:**

- a) Pursuant to 401 KAR 51:017, NO<sub>x</sub> emissions shall not exceed 13.65 pounds per hour total for Briquet Dryers #1 and #2 or 6.83 pounds per hour from each briquet dryer.

In order to preclude 401 KAR 51:017 significant revision applicability for the installation of Briquet Dryer #3, NO<sub>x</sub> emissions shall not exceed 4.55 pounds per hour from Briquet Dryer #3.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **2. Emission Limitations (Continued):**

- b) Pursuant to 401 KAR 51:017, PM/PM<sub>10</sub> emissions shall not exceed 14.1 pounds per hour total for Briquet Dryers #1 and #2 or 7.05 pounds per hour from each briquet dryer.

In order to preclude 401 KAR 51:017 significant revision applicability for the installation of Briquet Dryer #3, PM/PM<sub>10</sub> emissions shall not exceed 3.58 pounds per hour from Briquet dryer #3.

The PM/PM<sub>10</sub> limits are more stringent than the PM limits from 401 KAR 59:010.

- c) Pursuant to 401 KAR 59:010, Section 3(1), emissions from the unit shall not exceed twenty (20) percent opacity based on a six-minute average.

### **Compliance Demonstration Method:**

- a) For compliance with the NO<sub>x</sub> emission limits, see Subsection 3, Testing Requirements, Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Actual emission rate = [Monthly briquet production] x [Emission factor observed during most recent stack test (pounds NO<sub>x</sub> per ton of briquets)] ÷ [Monthly hours of dryer operation]

- b) For compliance with the PM/PM<sub>10</sub> emission limits, see Subsection 3, Testing Requirements, Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Actual emission rate = [Monthly briquet production] x [Emission factor observed during most recent stack test (pounds PM/PM<sub>10</sub> per ton of briquets)] ÷ [Monthly hours of dryer operation]

- c) For compliance with the visible emissions limit, see Subsection 4, Specific Monitoring Requirements and Subsection 5, Specific Recordkeeping Requirements.

### **3. Testing Requirements:**

- a) EPA Reference Method 5 or equivalent shall be performed within 1 year from issuance of this permit to determine the amount of PM emissions per ton of dry briquets processed through each briquet dryer.
- b) EPA Reference Method 7 or equivalent shall be performed within 1 year from issuance of this permit to determine the amount of NO<sub>x</sub> emissions per ton of dry briquets processed through each briquet dryer.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **3. Testing Requirements (Continued):**

- c) If visible emissions from the stack are seen from the weekly qualitative visual observation (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9.

### **4. Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the dry briquet processing rate and hours of operation on a daily basis.

### **5. Specific Recordkeeping Requirements:**

The permittee shall keep records of the following:

- a) Total dry briquets packaged and hours of operation on a monthly basis; and
- b) Weekly logs of visible emissions observations, including the following: 1) whether any air emissions were visible from combine briquet dryer/cooler stack; and 2) whether the visible emissions were normal for each stack. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the permittee shall perform a Method 9 reading for determining the opacity of the stack emissions. The opacity shall be recorded in the log.

### **6. Specific Reporting Requirements:**

See Section F, Conditions 5, 6, 7, and 8.

### **7. Specific Control Equipment Operating Conditions:**

None

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emissions Unit 03    Briquet Cooling Operations (Briquet Coolers #1, #2, and #3)**

#### **Description:**

Operating Rate: 8.5 tons of dry briquets per hour for each dryer (25.5 tons/hr total)  
Installation Date: Briquet Cooler #1 – 1995  
Briquet Cooler #2 – 2002  
Briquet Cooler #3 – 2003  
(2004 proposed increased throughput of briquets with no increase in potential emissions based on existing emission limits)  
Control Equipment: None

#### **APPLICABLE REGULATIONS:**

401 KAR 59:010 New process operations applicable to emission units commenced on or after July 2, 1975.  
401 KAR 51:017 Prevention of significant deterioration of air quality (PSD) – Best Available Control Technology (BACT) for particulate matter (PM), and particulate matter less than 10 microns (PM<sub>10</sub>) for Briquet Coolers #1 and #2.

#### **1. Operating Limitations:**

- a) Pursuant to 401 KAR 51:017, the dry briquet throughput shall not exceed 8.5 tons/hr through Briquet Cooler #1, and shall not exceed 8.5 tons/hr through Briquet Cooler #2.
- b) In order to preclude 401 KAR 51:017 significant revision applicability for the installation of Briquet Cooler #3, the dry briquet throughput shall not exceed 8.5 tons/hr through Briquet Cooler #3.

#### **Compliance Demonstration Method:**

For compliance with the dry briquet production limits, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Hourly briquet production throughput = [Total monthly briquets processed] ÷ [Total monthly hours of briquet cooler operation]

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **2. Emission Limitations:**

- a) Pursuant to 401 KAR 51:017, PM/PM<sub>10</sub> emissions shall not exceed 17.87 pounds per hour total for Briquet Coolers #1 and #2 or 8.94 pounds per hour from each briquet cooler.

In order to preclude 401 KAR 51:017 significant revision applicability for the installation of Briquet Cooler #3, PM/PM<sub>10</sub> emissions shall not exceed 3.58 pounds per hour from Briquet dryer #3.

The PM/PM<sub>10</sub> limits are more stringent than the PM limits from 401 KAR 59:010.

- b) Pursuant to 401 KAR 59:010, Section 3(1), emissions from the unit shall not exceed twenty (20) percent opacity based on a six-minute average.

### **Compliance Demonstration Method:**

- a) For compliance with the PM/PM<sub>10</sub> emission limits, see Subsection 3, Testing Requirements, Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Actual emission rate = [Monthly briquet production] x [Emission factor observed during most recent stack test (pounds PM/PM<sub>10</sub> per ton of briquets)] ÷ [Monthly hours of dryer operation]

- b) For compliance with the visible emissions limit, see Subsection 4, Specific Monitoring Requirements and Subsection 5, Specific Recordkeeping Requirements.

### **3. Testing Requirements:**

- a) EPA Reference Method 5 or equivalent shall be performed within 1 year from issuance of this permit to determine the amount of PM emissions per ton of dry briquets processed through each briquet cooler.
- b) If visible emissions from the stack are seen from the weekly qualitative visual observation (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **4. Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the dry briquet processing rate and hours of operation on a daily basis.

### **5. Specific Recordkeeping Requirements:**

The permittee shall keep records of the following:

- a) Total dry briquets packaged and hours of operation on a monthly basis; and
- b) Weekly logs of visible emissions observations, including the following: 1) whether any air emissions were visible from combine briquet dryer/cooler stack; and 2) whether the visible emissions were normal for each stack. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the permittee shall perform a Method 9 reading for determining the opacity of the stack emissions. The opacity shall be recorded in the log.

### **6. Specific Reporting Requirements:**

See Section F, Conditions 5, 6, 7, and 8.

### **7. Specific Control Equipment Operating Conditions:**

None

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emission Unit 04      Charcoal Manufacturing Operations**

#### **Description:**

##### **STOR 4001 - Briquet Handling and Storage Dust Collector #1 (north)**

Installation Date: 2002

##### **STOR 4002 - Briquet Handling and Storage Dust Collector #2 (south)**

Installation Date: 1995

##### **STOR 4003 - Packaging Operations Dust Collector and Fines Tank**

Installation Date: 2002

Operating rate: 25.5 tons of dry briquets/hour (proposed increased capacity, but no increase in potential emissions based on same fan blowers and filters and existing PSD limit of 0.01 gr/scf of PM/PM<sub>10</sub>)

Control Equipment: Fabric Filters

#### **Description:**

##### **STOR 4004 – Starch Silo**

Installation Date: 1995

##### **STOR 4005 – Converted Lime to Starch Silo**

Installation Date: 1995, Conversion to Lime Proposed 2004

##### **STOR 4006 – Sawdust Silo**

Installation Date: 1995

Operating rate: 35 tons of material handled/hour

Control Equipment: Fabric Filters on Bin Vents

#### **Description:**

##### **STOR 4007 – Char Load Drop**

Installation Date: 2001

Operating rate: 75 tons of material handled/hour

Control Equipment: Fabric Filter

#### **Description:**

##### **STOR 4008 – Mix Tank**

Installation Date: 1995

Operating rate: 35 tons of material processed/hour

Control Equipment: Fabric Filter

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emission Unit 04      Charcoal Manufacturing Operations (Continued)**

#### **APPLICABLE REGULATIONS:**

- |                |   |
|----------------|---|
| 401 KAR 59:010 | New process operations applicable to emission units commenced on or after July 2, 1975.   |
| 401 KAR 51:017 | Prevention of significant deterioration of air quality (PSD) – Best Available Control Technology (BACT) for particulate matter (PM), and particulate matter less than 10 microns (PM <sub>10</sub> ). |

#### **1. Operating Limitations:**

Pursuant to 401 KAR 51:017, each of the above-listed sources shall be equipped with a fabric filter. The fabric filters shall control emissions of PM and PM<sub>10</sub> and shall be in operation and be operated properly, in accordance with manufacturer's specifications and/or standard operating procedures at all times the sources are in operation. The silo and mix tank dust collectors are considered in operation any time material is being conveyed into the silos.

#### **Compliance Demonstration Method:**

The permittee shall record the occurrence and duration of each incident when the sources are in operation, but the associated fabric filter is not.

#### **2. Emission Limitations:**

- a) Pursuant to 401 KAR 51:017, PM/PM<sub>10</sub> emissions from each of the fabric filter collectors serving the sources shall not exceed an outlet PM/PM<sub>10</sub> concentration of 0.01 grains per standard cubic foot (gr/scf).
- b) Pursuant to 401 KAR 59:010, Section 3(1), emissions from the unit shall not exceed twenty (20) percent opacity based on a six-minute average.

#### **Compliance Demonstration Method:**

Compliance with the emission limitations is demonstrated during normal operations of the fabric filters, based on controls design and good operating and maintenance practices.

In the event of any malfunction of a fabric filter that may increase emissions to the atmosphere, see Subsection 3, Testing Requirements and Subsection 5, Specific Recordkeeping Requirements.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **3. Testing Requirements:**

During periods of malfunction of any fabric filter, if visible emissions are seen, the permittee shall perform a Method 9 reading daily to determine the opacity of the emissions.

### **4. Specific Monitoring Requirements:**

The permittee shall monitor the control equipment for each unit, according to the manufacturer recommendations for proper operation of the equipment.

### **5. Specific Recordkeeping Requirements:**

a) During periods of malfunction of any fabric filter, if the associated source is in operation, a daily log of the following information shall be kept:

(1) Whether any air emissions were visible from the fabric filter stacks.

(2) If visible emissions are seen, the permittee shall perform a Method 9 reading to determine the opacity of the emissions. The opacity shall be recorded in the log. If opacity is shown to exceed the limitation of twenty (20) percent based on a six-minute average, material loading to that affected silo should cease as soon as possible, but no later than the end of that working day, and the fabric filter should be repaired or replaced to assure compliance with the opacity regulations.

b) Records of any repairs that were made due to any opacity reading that exceeded the standard.

### **6. Specific Reporting Requirements:**

See Section F, Conditions 5, 6, 7, and 8.

### **7. Specific Control Equipment Operating Conditions:**

a) The filter shall be installed and maintained in accordance with manufacturer's specifications and/or standard operating procedures at all times equipment is operating.

b) Records regarding the maintenance of the filter shall be maintained.

c) See Section E.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emissions Unit 05    Material Handling Operations and Plant In/Out Roadways**

#### **Description:**

##### **EQPT 5001 – Coal Drop Points**

Installation Date: 2001 (proposed 2004 increase in maximum operating rate)

Operating Rate: 100,000 tons/yr

Control Equipment: Partial process enclosure

##### **EQPT 5002 – Char Loading**

Installation Date: 2002

Operating Rate: 50,000 tons/yr

Control Equipment: Partial process enclosure

##### **EQPT 5003 – Char Receiving**

Installation Date: 2001

Operating Rate: 13,440 tons/yr

Control Equipment: Partial process enclosure

##### **EQPT 5004 – Truck Dump**

Installation Date: 2001 (proposed 2004 relocation)

Operating Rate: 198,000 tons/yr of dry wood  
(max. hourly rate of 55 tons/hr)

Control Equipment: Wood moisture and partial process enclosure

##### **EQPT 5005 – Sized Wood Pile, and Front-end Loader Traffic**

Installation Date: 2001 (proposed 2004 relocation)

Operating Rate: 100,000 tons/yr of wet wood

Control Equipment: Wood moisture

##### **EQPT 5006 – Plant Roadways In/Out**

Installation Date: 1995

Operating Rate: 10,127 Vehicle Miles Traveled (VMT) per year

Control Equipment: Speed controls

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emissions Unit 05    Material Handling Operations and Plant In/Out Roadways**

#### **APPLICABLE REGULATIONS:**

- |                |   |
|----------------|---|
| 401 KAR 63:010 | Fugitive emissions  |
| 401 KAR 51:017 | Prevention of significant deterioration of air quality (PSD) – Best Available Control Technology (BACT) for particulate matter (PM), and particulate matter less than 10 microns (PM <sub>10</sub> ). |

#### **1. Operating Limitations:**

- a) Pursuant to 401 KAR 51:017, the permittee shall limit the throughput of the coal drop points such that the maximum annual total (12-month rolling average) does not exceed 100,000 tons per year.
- b) Pursuant to 401 KAR 51:017, the permittee shall limit the char handling throughput such that the maximum annual total (12-month rolling average) does not exceed 50,000 tons per year for the loading operations and 13,440 tons per year for the receipt operations.
- c) Pursuant to 401 KAR 63:010, all reasonable measures shall be taken to prevent particulate matter from becoming airborne at all times. These measures shall include but not be limited to the following:
  - 1) Use of partial enclosures for char and wood receipt operations.
  - 2) Paving roadways and maintaining in-plant speed controls.

#### **Compliance Demonstration Method:**

For compliance with the throughput limits on coal and char, see Subsection 4, Specific Monitoring Requirements and Subsection 5, Specific Recordkeeping Requirements.

Compliance with operating limitations to suppress and minimize fugitive dust emissions will be demonstrated by speed controls, and good operating practices during material handling.

#### **2. Emission Limitations:**

- a) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.
- b) Pursuant to 401 KAR 51:017, the permittee shall operate the emissions sources listed in this section in such a manner as to minimize fugitive dust emissions and PM/PM<sub>10</sub> emissions.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**2. Emission Limitations (Continued):**

**Compliance Demonstration Method:**

For compliance with the visible fugitive dust emission limitations, see Subsection 1, Operating Limitations.

**3. Testing Requirements:**

None

**4. Specific Monitoring Requirements:**

The permittee shall monitor the material throughput rates on a monthly basis.

**5. Specific Recordkeeping Requirements:**

The permittee shall record the material throughput rates on a monthly basis.

**6. Specific Reporting Requirements:**

None

**7. Specific Control Equipment Operating Conditions:**

None

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emissions Unit 06    Solvent Treated Briquet (STB) Operations**

#### **Description:**

**EQPT 6001 – Solvent Storage Tank, Piping, Pumps, and Valves leaks/losses**

**EQPT 6002 – Solvent Application Losses and Packaging**

**EQPT 6003 – STB Fines and Rerun Processing**

Installation Date:     1995

Operating Rate:        40,000 tons/yr (maximum 20 tons/hr)

Control Equipment:    None

#### **APPLICABLE REGULATIONS:**

401 KAR 63:010        Fugitive emissions

#### **1. Operating Limitations:**

- a) Pursuant to 401 KAR 63:010, when gases, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.
- b) Pursuant to the applicant request for an operating restriction through federally enforceable limitations in the application, the maximum annual limit of solvent treated briquets (STB) produced shall not exceed 40,000 tons per year.

#### **Compliance Demonstration Method:**

For compliance, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

#### **2. Emission Limitations:**

In order to preclude 401 KAR 51:017, VOC emissions shall not exceed 98 tons per year.

#### **Compliance Demonstration Method:**

For compliance, see Subsection 1, Operating Limitations, Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**3. Testing Requirements:**

None

**4. Specific Monitoring Requirements:**

The permittee shall monitor the amount of STB production on a monthly basis.

**5. Specific Recordkeeping Requirements:**

The permittee shall record the amount of STB production on a monthly basis.

**6. Specific Reporting Requirements:**

None

**7. Specific Control Equipment Operating Conditions:**

None

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emissions Unit 07    Storage Silos**

#### **Description:**

##### **STOR 7001 – Char Silo #1**

##### **STOR 7002 – Char Silo #2**

##### **STOR 7003 – Char Silo #3**

Installation Date: 1995 existing silo  
Operating Rate: 7 tons/hr of char for each silo  
Control Equipment: none

##### **STOR 7004 – Char Silo #4**

Installation Date: Proposed 2004  
Operating Rate: 7 tons/hr of char  
Control Equipment: none

##### **STOR 7005 – Lime Silo**

Installation Date: Proposed 2004  
Operating Rate: 35 tons/hr of lime  
Control Equipment: fabric filter

##### **STOR 7006 – Carbonaceous Material Silo #1**

##### **STOR 7007 – Carbonaceous Material Silo #2**

Installation Date: 1995 existing silo  
Operating Rate: 35 tons/hr of carbonaceous material for each silo  
Control Equipment: none

#### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations applicable to emission units commenced on or after July 2, 1975.

#### **1. Operating Limitations:**

- a) In order to preclude 401 KAR 51:017 significant revision applicability for the installation of Char Silo #4, the maximum loading rate of Char Silo #4 shall not exceed 7 tons per hour of char.
- b) In order to preclude 401 KAR 51:017 significant revision applicability for the installation of the Lime Silo, the maximum loading rate of Lime Silo shall not exceed 35 tons per hour of lime. The Lime Silo shall be equipped with a fabric filter. The fabric filter shall control emissions of PM and PM<sub>10</sub> and shall be in operation and be operated properly, in accordance with manufacturer's specifications and/or standard operating procedures at all times the source is in operation. The silo is considered in operation any time material is being conveyed into the silo.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **2. Emission Limitations:**

- a) Pursuant to 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air shall not exceed  $[3.59(P)^{0.62}]$  lbs/hour based on a three-hour average where P is the processing rate in tons per hour.
- b) Pursuant to 401 KAR 59:010, Section 3(1)(a), visible emissions from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

#### **Compliance Demonstration Method:**

- a) For compliance with the PM emission limit for the char and carbonaceous material silos, an emission factor of 0.0007 lbs PM/ton of char shall be used, based on the permittee application, which states minimal dust from char transfer to the silo by the quenching of the char with water after it leaves the furnace.

For compliance with the PM emission limit for the lime silos, see Subsection 1, Operating Limitations for the required fabric filter for control of PM emissions.

- b) For compliance with visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.

### **3. Testing Requirements:**

If visible emissions from the stacks are seen from the weekly qualitative visual observation (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9.

### **4. Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from the stacks are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the char, lime, and carbonaceous material processing rate and hours of operation on a monthly basis.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Specific Recordkeeping Requirements:**

- a) Records of the char, lime, and carbonaceous material processed and hours of operation on a daily basis shall be maintained.
- b) Records of any repairs that were made due to any opacity reading which exceeded the standard.

**6. Specific Reporting Requirements:**

See Section F, Conditions 5, 6, 7, and 8.

**7. Specific Control Equipment Operating Conditions:**

None

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**Emissions Unit 08    Alternative Wood Truck Unloading, Warehouse Road, Warehouse Lot, Walking Floor Trailer Unloading for Unsized Pile, and Unsized Wood Pile and Bulldozer Traffic**

**Description:**

**EQPT 8001 – Alternative Wood Truck Unloading for Sized Pile**

Installation Date:    Proposed 2004  
Operating Rate:        10.42 tons/hr  
Control Equipment:    Speed control

**EQPT 8002 – Warehouse Road**

Installation Date:    Proposed 2004  
Operating Rate:        0.0366 Vehicle Miles Travelled (VMT) per hour  
Control Equipment:    Speed control

**EQPT 8003 – Alternative Wood Truck Road**

Installation Date:    Proposed 2004  
Operating Rate:        0.084 Vehicle Miles Travelled (VMT) per hour  
Control Equipment:    Speed control

**EQPT 8004 – Warehouse Lot**

Installation Date:    Proposed 2004  
Operating Rate:        0.0366 VMT/hr  
Control Equipment:    Speed control

**EQPT 8005 – Walking Floor Trailer Unloading for Unsized Pile**

Installation Date:    Proposed 2004  
Operating Rate:        22,000 tons/yr of dry wood  
                                  (max. hourly rate of 13.75 tons/hr)  
Control Equipment:    Wood moisture and partial process enclosure

**EQPT 8006 – Unsized Wood Pile and Bulldozer Traffic**

Installation Date:    Proposed 2004  
Operating Rate:        220,000 tons/yr of dry wood  
                                  (max. hourly rate of 68.75 tons/hr)  
Control Equipment:    Wood moisture and partial process enclosure

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**Emissions Unit 08     Alternative Wood Truck Unloading, Warehouse Road, Warehouse Lot, Walking Floor Trailer Unloading for Unsized Pile, and Unsized Wood Pile and Bulldozer Traffic**

### **APPLICABLE REGULATIONS:**

401 KAR 63:010     Fugitive emissions

#### **1. Operating Limitations:**

Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

- a) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
- b) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
- c) The maintenance of paved roads in a clean condition; and
- d) The prompt removal of earth or other material from a paved street, which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.

#### **Compliance Demonstration Method:**

Compliance with operating limitations to suppress and minimize fugitive dust emissions will be demonstrated by the good operating procedures listed above, and good operating practices during material handling.

#### **2. Emission Limitations:**

Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

#### **Compliance Demonstration Method:**

For compliance with the emission limitation, see Subsection 1, Operating Limitations.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**3. Testing Requirements:**

None

**4. Specific Monitoring Requirements:**

The permittee shall monitor the amount of raw materials and final products to estimate vehicle miles traveled for use in the AP-42 emission calculations for paved and unpaved roadways on a monthly basis.

**5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of the calculations to determine the fugitive emissions from paved and unpaved roads with all data used in the calculations. Records shall be maintained for the current year and the two previous years. Emission calculations shall be based on the most current AP-42 emission factors for paved and unpaved roadways for that year.

**6. Specific Reporting Requirements:**

See Section F, Conditions 5, 6, 7, and 8.

**7. Specific Control Equipment Operating Conditions:**

None

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emission Unit 09      Nitrate Silo**

#### **Description:**

##### **STOR 9001 – Nitrate Silo**

Installation Date:      Proposed 2004

Operating rate:          35 tons of material handled/hour

Control Equipment:      Fabric Filters on Bin Vents

#### **APPLICABLE REGULATIONS:**

401 KAR 59:010          New process operations applicable to emission units commenced on or after July 2, 1975.

#### **1. Operating Limitations:**

In order to preclude 401 KAR 51:017 significant revision applicability for the installation of the nitrate silo, the emission unit shall be equipped with a fabric filter. The fabric filters shall control emissions of PM and PM<sub>10</sub> and shall be in operation and be operated properly, in accordance with manufacturer's specifications and/or standard operating procedures at all times the sources are in operation. The silo fabric filter is considered in operation any time material is being conveyed into the silo.

#### **Compliance Demonstration Method:**

The permittee shall record the occurrence and duration of each incident when the sources are in operation, but the associated fabric filter is not.

#### **2. Emission Limitations:**

- a) In order to preclude 401 KAR 51:017 significant revision applicability for the installation of the nitrate silo, PM/PM<sub>10</sub> emissions from the fabric filter collectors serving the source shall not exceed an outlet PM/PM<sub>10</sub> concentration of 0.01 grains per standard cubic foot (gr/scf).
- b) Pursuant to 401 KAR 59:010, Section 3(1), emissions from the unit shall not exceed twenty (20) percent opacity based on a six-minute average.

#### **Compliance Demonstration Method:**

Compliance with the emission limitations is demonstrated during normal operations of the fabric filter, based on controls design and good operating and maintenance practices.

In the event of any malfunction of a fabric filter that may increase emissions to the atmosphere, see Subsection 4, Testing Requirements and Subsection 5, Specific Recordkeeping Requirements.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **3. Testing Requirements:**

During periods of malfunction of any fabric filter, if visible emissions are seen, the permittee shall perform a Method 9 reading daily to determine the opacity of the emissions.

### **4. Specific Monitoring Requirements:**

The permittee shall monitor monthly hours of operation of the nitrate silo.

### **5. Specific Recordkeeping Requirements:**

- a) The permittee shall record monthly hours of operation and maintenance of the nitrate silo or the controls for the silo.
- b) During periods of malfunction of any fabric filter, if the associated source is in operation, a daily log of the following information shall be kept:
  - (1) Whether any air emissions were visible from the fabric filter stack.
  - (2) If visible emissions are seen, the permittee shall perform a Method 9 reading to determine the opacity of the emissions. The opacity shall be recorded in the log. If opacity is shown to exceed the limitation of twenty (20) percent based on a six-minute average, material loading to that affected silo should cease as soon as possible, but no later than the end of that working day, and the fabric filter should be repaired or replaced to assure compliance with the opacity regulations.
- c) Records of any repairs that were made due to any opacity reading that exceeded the standard.

### **6. Specific Reporting Requirements:**

See Section F, Conditions 5, 6, 7, and 8.

### **7. Specific Control Equipment Operating Conditions:**

- a) The filter shall be installed and maintained in accordance with manufacturer's specifications and/or standard operating procedures at all times equipment is operating.
- b) Records regarding the maintenance of the filter shall be maintained.
- c) See Section E.

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	<u>Generally Applicable Regulation</u>
1.	5.685 mmBtu/hr natural gas-fired boiler	401 KAR 59:015
2.	100.6 hp emergency power generator	N/A
3.	Charcoal packaging and palletizing operations	401 KAR 59:010
4.	Charcoal warehouse operations	401 KAR 59:010
5.	Charcoal briquet mixing and pressing operations	401 KAR 59:010
6.	Plant maintenance activities	N/A
7.	Misc. natural gas-fired space heaters	N/A
8.	Ink jet printing	401 KAR 63:010
9.	Maintenance degreasing	N/A
10.	Laboratory hoods	401 KAR 63:010
11.	Gasoline storage tanks	401 KAR 63:010
12.	Diesel storage tanks	401 KAR 63:010
13.	Bulk material handling (super sack)	401 KAR 59:010
14.	Reject bunker	N/A
15.	Briquet silo discharge to conveyors	401 KAR 63:010

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. PM, PM<sub>10</sub>, SO<sub>2</sub>, VOC, and NO<sub>x</sub> emissions as measured by applicable reference methods, or an equivalent or alternative method specified in 40 CFR Chapter 1, or by a test method specified in the approved state implementation plan.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V )1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

## **SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

## **SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality  
Bowling Green Regional Office  
1508 Western Avenue  
Bowling Green, KY 42104-3356

U.S. EPA Region IV  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta, GA 30303-8960

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

## SECTION G - GENERAL PROVISIONS

### (a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

## SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

## SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
  - a. Applicable requirements that are included and specifically identified in the permit and
  - b. Non-applicable requirements expressly identified in this permit.

### (b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

### (c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

### (d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

The following units will be modified, replaced, or are proposed new units:

Emission Unit 04      Charcoal Manufacturing Operations (STOR 4005 – Converted Lime to Starch Silo, proposed 2004)

## SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements (Continued)

Emissions Unit 05     Material Handling Operations and Plant In/Out Roadways (EQPT 5001 – Coal Drop Points, proposed 2004 increase in maximum operating rate; and EQPT 5004 – Truck Dump, proposed 2004 relocation)

Emissions Unit 07     Storage Silos (STOR 7004 – Char Silo #4 and STOR 7005 – Lime Silo, proposed 2004)

Emissions Unit 08     Alternative Wood Truck Unloading, Warehouse Road, and Warehouse Lot (EQPT 8001 – Alternative Wood Truck Unloading, EQPT 8002 – Warehouse Road, and EQPT 8003 – Warehouse Lot, proposed 2004; EQPT 8005 – Walking Floor Trailer Unloading for Unsized Pile, proposed 2004 relocation; and EQPT 8006 – Unsized Wood Pile and Bulldozer Traffic, proposed 2004 relocation)

Emission Unit 09     Nitrate Silo, proposed 2004

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction or modification of the equipment described herein, emission units EU-04, EU-05, EU-07, EU-08 and EU-09 in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the affected facilities listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
  5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (*test*) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. ***These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test***
  6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.
  7. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
  8. Pursuant to Section VII 1.(2 and 3) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), if a demonstration of compliance, through performance testing was made at a production rate less than the maximum specified in the application form, then the permittee is only authorized to operate at a rate that is not greater than 110% of the rate demonstrated during performance testing. If and when the facility is capable of operation at the rate specified in the application, compliance must be demonstrated at the new production rate if required by the Division.
- (e) Acid Rain Program Requirements  
*No Acid Rain authorized by this permit*

## SECTION G - GENERAL PROVISIONS (CONTINUED)

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - e. This requirement does not relieve the source of other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (e)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 3346  
Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

## SECTION G - GENERAL PROVISIONS (CONTINUED)

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(i) Ozone depleting substances (Continued)

- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

## **SECTION H - ALTERNATE OPERATING SCENARIOS**

None

## **SECTION I - COMPLIANCE SCHEDULE**

None